

CLAIMS:

Please amend claims 17, 19, 26-28.

1-16. (cancelled).

17. (currently amended) A speech decoder that decodes parameters received/transmitted parameters in frames and reconstructs a speech based on the received parameters, comprising:

a first-stage decoding circuit that generates excitation vectors from the transmitted-received parameters:

a second-stage decoding circuit that performs a speech synthesis, using the excitation vectors, to obtain a reconstructed speech;

~~an error detector that detects transmission errors in the transmitted parameters; and~~

~~an vector modifier~~adaptive preprocessing filter, located between the first-stage and second-stage circuits, that ~~enhances perceptual quality of the reconstructed speech, wherein the vector modifier modifies emphasizes, to a degree, a harmonic component of~~ at least one of the excitation vectors; and

an error frame counter that counts successive error frames that contain a transmission error, the error frame counter operably connected to the adaptive preprocessing filter to decrease the degree of emphasis performed thereby as a count of the successive error frames increases, wherein the error frame counter disables the adaptive preprocessing filter to effect zero emphasis on the at least one of the excitation vectors when the count of the successive error frames reaches a predetermined number in such a manner as to obtain a variable degree of enhancement determined based on the transmission errors detected by the error detector.

18. (previously added) A speech decoder according to claim 17, wherein the

first-stage decoding circuit comprises an adaptive code decoder and a fixed code decoder.

19. (currently amended) A speech decoder according to claim 18, wherein the ~~vector modifier modifies~~adaptive preprocessing filter emphasizes a harmonic component of excitation vectors output from the fixed code decoder.

20. (previously added) A speech decoder according to claim 17, wherein the second-stage decoding circuit comprises a speech synthesis filter excited by the excitation vectors.

21. (previously added) A speech decoder according to claim 20, wherein the second-stage decoding circuit further comprises at least one post-processing filter.

22-25. (cancelled)

26. (currently amended) A speech decoder according to claim ~~24~~17, wherein the ~~degree of enhancement performed by the vector modifier~~adaptive preprocessing filter is configured to emphasize the harmonic component to a fixed degree and is fixed to one degree and becomes zero~~disabled by the error frame counter~~ when the ~~number of successive frames that contain a transmission error~~the count by the error frame counter reaches a ~~the~~ predetermined number.

27. (currently amended) A speech decoder according to claim 17, where the ~~vector modifier comprises one or more~~adaptive preprocessing filters is configured to emphasize the harmonic component to variable degrees with different degrees of enhancement, and the error frame counter selectively effects the variable degrees of emphasis in a descending manner as the count by the error frame counter increases.

28. (currently amended) A speech decoder according to claim 17, wherein the ~~parameters are created under~~speech decoder uses a coding scheme selected from a group consisting of a Conjugate Structure Algebraic Code Excited Linear

Prediction (CS-ACELP) scheme, an Adaptive Predictive Coding (APC) scheme, an Adaptive Predictive Coding with Adaptive Bit Allocation (APC-AB) scheme, an APC-MLQ scheme, an Adaptive Transform Coding (ATC) scheme, a Multi Pulse Coding (MPC) scheme, a Linear Prediction Coding (LPC) scheme, a Residual Excited Linear Prediction Coding (RELPC) scheme, a Code Excited Linear Prediction Coding (CELP) scheme, a Line Spectrum Pair Coding (LSP) scheme, and a PARCOR scheme.

29-36. (currently cancelled)

Please add following new claims 37 and 38:

37. (new) A speech decoder according to claim 27, wherein the adaptive preprocessing filter comprises a plurality of filters each effecting a different degree of emphasis, and the error frame counter selectively enables these filters in a descending manner as to their degrees of emphasis as the count by the error frame counter increases.

38. (new) A speech decoder according to claims 27, wherein the adaptive preprocessing filter receives a gain input a variation of which effects variable degrees of emphasis by the adaptive preprocessing filter, and the error frame counter varies the gain input to effect different degrees of emphasis in a descending manner as the count by the error frame counter increases.